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PATENT
0002-2CLEAN SET OF PENDING CLAIMS:

1. A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

- FS
- (a) ethanol having between 0.5 and 25 % water by volume of ethanol;
 - (b) one or more alcohols selected from the group consisting of:
 - (i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms
 - (ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and
 - (iii) combinations of b(i) and b(ii);
 - (c) a fatty acid of the structure $R-(C=O)-OH$, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous state or as an aqueous solution;

wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity within $\pm 10\%$ of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated.

459. A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

- FL6
- (a) ethanol having between 0.5%-25% water by volume of ethanol;
 - (b) one or more alcohols selected from the group consisting of:
 - (i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms,
 - (ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and
 - (iii) combinations of b(i) and b(ii);

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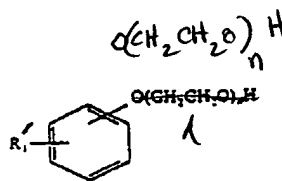
(c) a fatty acid of the structure $R-(C=O)-OH$, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous state or as an aqueous solution; wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity within $\pm 10\%$ of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated, wherein: in subpart (a) the alcohol is ethanol having between 0.5%-5% water by volume of ethanol; in subpart (b) one or more alcohols selected from the group consisting of:

- (b)(i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms,
- (b)(ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and
- (b)(iii) combinations of b(i) and b(ii);

in subpart (c) the ammonia or urea is present sufficient to neutralize 40-80% of the fatty acid and completely eliminated are the following compounds:

the ethylene oxide condensation or esterification product formed with (i) an alkyl phenol

of the formula:



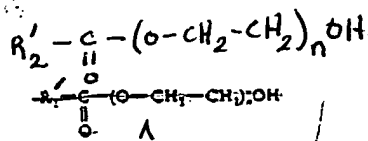
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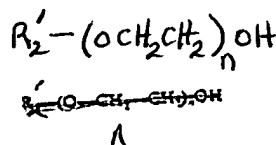
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where R'_1 is a alkyl chain having up to 8 carbon atoms and n is an integer from 5 to 20;

(ii) a fatty acid of the formula:

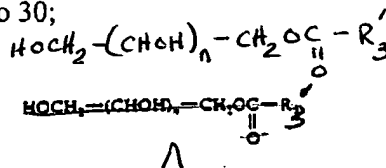


(iii) a fatty alcohol of the formula:



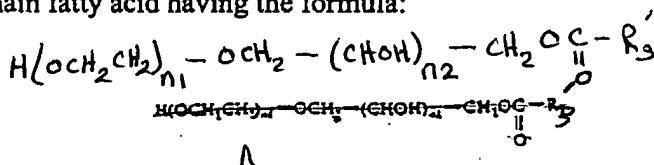
wherein R'_2 is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 5 to 30;

(iv) a polyol having the formula:



wherein R'_3 is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 1 to 4; or

(v) a polyol and long-chain fatty acid having the formula:



wherein R'_3 has the meaning given above, n_1 is an integer from 5 to 30 and n_2 is an integer from 1 to 4.

3 combustible fuel composition

60. The additive of Claim 59 wherein:

in subpart (b) the alcohol of

(b)(i) is straight- or branched-chain alcohols having between 3 and 5 carbon atoms, with the proviso that

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~~carbon atoms, with the proviso that~~

(b)(ii) is excluded, and

(b)(iii) is excluded.

61. ~~The additive of Claim 59~~ ^{combustible fuel composition} wherein

in subpart (b) the alcohol

(b)(i) is excluded,

(b)(ii) is straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and

(b)(iii) excluded.

62. ~~The additive of Claim 59~~ ^{combustible fuel composition} wherein:

the ratio of subparts (a):(b):(c) is between about 50:45:5 to 50:25:25.

63. ~~The additive of Claim 59~~ ^{combustible fuel composition} wherein:

the ratio of subparts (a):(b):(c) is between about 60:35:5 to 60:20:20.

64. A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

(a) ethanol having between 0.5 and 10 % water by volume of ethanol;

(b) one or more alcohols selected from the group consisting of:

(i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms

(ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and

(iii) combinations of b(i) and b(ii);

(c) a fatty acid of the structure $R-(C=O)-OH$, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous state or as an aqueous solution and the ammonia or urea is present sufficient to neutralize about 40-80% of the fatty acid;

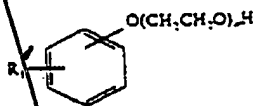
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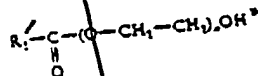
wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity within $\pm 10\%$ of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated, and completely eliminated are the following compounds:

the ethylene oxide condensation or esterification product formed with (i) an alkyl phenol of the formula:

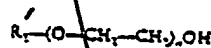


where R'_1 is a alkyl chain having up to 8 carbon atoms and n is an integer from 5 to 20;

(ii) a fatty acid of the formula:

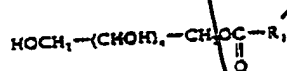


(iii) a fatty alcohol of the formula:



wherein R'_2 is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 5 to 30;

(iv) a polyol having the formula:



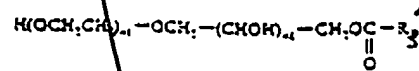
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wherein R', is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 1 to 4; or

(v) a polyol and long-chain fatty acid having the formula:



wherein R', has the meaning given above, n_1 is an integer from 5 to 30 and n_2 is an integer from 1 to 4.

12 combustible fuel composition

65 The additive of Claim 64 wherein;

in subpart (b) the alcohol

(b)(i) is excluded,

(b)(ii) is straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and

(b)(iii) is excluded.

13 combustible fuel composition

66 The additive of Claim 64 wherein:

the ratio of subparts (a):(b):(c) is between about 50:40:10 to 50:25:25.

14 combustible fuel composition

67 The additive of Claim 64 wherein:

the ratio of subparts (a):(b):(c) is between about 60:30:10 to 60:20:20.

68 A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

(a) ethanol having between 10 and 25 % water by volume of ethanol;

(b) one or more alcohols selected from the group consisting of:

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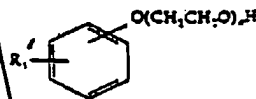
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- (i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms
 (ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms, and
 (iii) combinations of b(i) and b(ii);
 (c) a fatty acid of the structure $R-(C=O)-OH$, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous state or as an aqueous solution and the ammonia or urea is present sufficient to neutralize about 40-80% of the fatty acid;

wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity within $\pm 10\%$ of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated, and

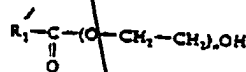
completely eliminated are the following compounds:

the ethylene oxide condensation or esterification product formed with (i) an alkyl phenol of the formula:

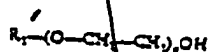


where R'_1 is a alkyl chain having up to 8 carbon atoms and n is an integer from 5 to 20;

(ii) a fatty acid of the formula:



(iii) a fatty alcohol of the formula:



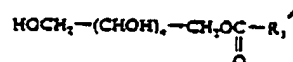
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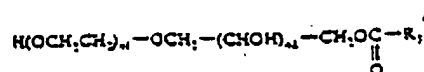
wherein R'_2 is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 5 to 30;

(iv) a polyol having the formula:



wherein R'_1 is a long-chain, saturated or unsaturated hydrocarbon radical containing 12 to 18 carbon atoms, and n is an integer from 1 to 4; or

(v) a polyol and long-chain fatty acid having the formula:



wherein R'_1 has the meaning given above, n_1 is an integer from 5 to 30 and n_2 is an integer from 1 to 4.

combustible fuel composition

68. The additive of Claim 68 wherein;

in subpart (b) the alcohol of

(b)(i) is excluded,

(b)(ii) is straight- or branched-chain alcohols having between 6 and 12 carbon atoms, with the proviso that

(b)(iii) is excluded.

combustible fuel composition

70. The additive of Claim 68 wherein:

the ratio of subparts (a):(b):(c) is between about 50:30:20 to 50:25:25.

Please cancel claims 71 to 76 and examine instead new claims 78-84.

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2 *combustible fuel composition*
26. (New) The ~~additive~~ of Claim 1 where the ratio of diesel fuel to additive is between about 80:20 to 90:10.

3 *combustible fuel composition*
27. (New) The ~~additive~~ of Claim 1 where the ratio of diesel fuel to additive is between about 90:10 to 99:1.

9 *combustible fuel composition*
28. (New) The ~~additive~~ of Claim 59 where the ratio of diesel fuel to additive is between about 80:20 to 90:10.

10 *combustible fuel composition*
29. (New) The ~~additive~~ of Claim 59 where the ratio of diesel fuel to additive is between about 90:10 to 99:1.

15 *combustible fuel composition*
32. The ~~additive~~ of Claim 54 where the ratio of diesel fuel to additive is between about 80:20 to 90:10.

16 *combustible fuel composition*
33. (New) The ~~additive~~ of Claim 64 where the ratio of diesel fuel to additive is between about 90:10 to 99:1.

20 *combustible fuel composition*
34. (New) The ~~additive~~ of Claim 68 where the ratio of diesel fuel to additive is between about 80:20 to 99:1.

REMARKS

Applicant first amended the claims BASED ON THE PRELIMINARY AMENDMENT B FILED BY TELEFAX ON March 22, 2001 to better explain and define the present invention. Water was earlier added to the claim. By definition water is present in a (this) microemulsion. Water is present by direct addition, by being present in small amounts in some of the organic components present or added, or is available in sufficient quantities to form the microemulsion from the ambient atmosphere and/or equipment. The support for the water is found throughout the specification and claims.

Applicant in Claim 1ff have amended all claims in subpart (a) to recite ethanol as